

11-10-03.

2672

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EXPRESS MAIL LABEL NO.: EV329632523 US

PATENT APPLICATION

Docket No.: 14984.4.1.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## TRANSMITTAL FOR INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing and pursuant to 37 C.F.R. § 1.97 is an Information Disclosure Statement.

Enclosed also are the following designated documents, as required under 37 C.F.R. §§ 1.97 and 1.98:

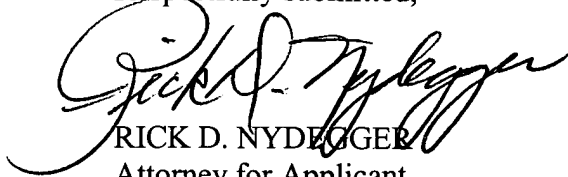
X Form PTO-1449 list of 90 references submitted for consideration.

X Legible copies of the listed references or their relevant portions.

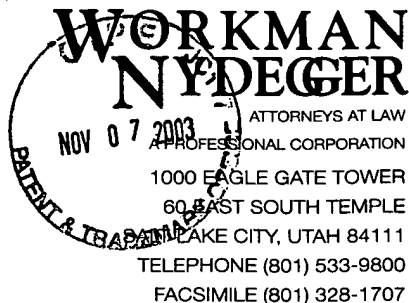
— All English translations of each non-English reference, if any, within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) (see 37 C.F.R. § 1.98(c)).

Dated this 7<sup>th</sup> day of November, 2003.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Rick D. Nydegger", written over the printed name.

RICK D. NYDEGGER  
Attorney for Applicant  
Registration No. 28,651  
Customer No. 022913



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EXPRESS MAIL LABEL NO.: EV 329632253 US

PATENT APPLICATION  
Docket No.: 14984.4.1.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:		)
		)
	Beat Stamm, et al.	)
		)
Serial No.:	10/606,047	) Art Unit
		) 2672
Filed:	June 24, 2003	)
		)
Confirmation No.:	3820	)
		)
For:	AUTOMATIC OPTIMIZATION OF THE	)
	POSITION OF STEMS OF TEXT CHARACTERS	)
		)
Examiner:	Unassigned	)

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. § 1.97

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or

more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that any of these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

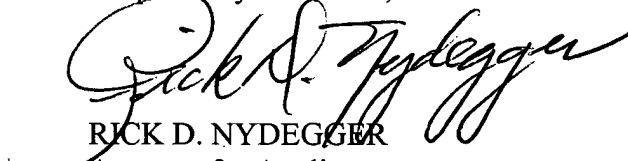
Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed references or relevant portion thereof is also enclosed.

In accordance with 37 C.F.R. § 1.98(c), all English translations within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) of each nonenglish reference, if any, are also enclosed.

Dated this 7<sup>th</sup> day of November, 2003.

Respectfully submitted,

  
RICK D. NYDEGGER  
Attorney for Applicant  
Registration No. 28,651  
Customer No. 022913

EXPRESS MAIL LABEL NO.: EV 329632523 US

Form PTO-1449

Sheet 1 of 11

Applicant: Beat Stamm, et al.

Serial No.: 10/606,047

Att'y Docket No.: 14984.4.1.1

Filing Date: June 24, 2003

Group: 2672

Confirmation No.: 3820

For: AUTOMATIC OPTIMIZATION OF THE POSITION  
OF STEMS OF TEXT CHARACTERS

INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANT

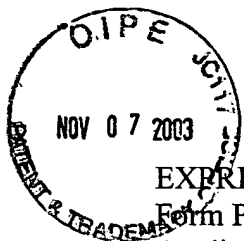
U.S. Patent Documents

<u>Examiner Initial*</u>	<u>Patent Number</u>	<u>Issue Date</u>	<u>Name</u>	<u>Class</u>	<u>Sub Class</u>	<u>Filing Date</u>
_____ A1.	4,136,359	01/23/1979	Wozniak	358	17	04/11/1977
_____ A2.	4,217,604	08/12/1980	Wozniak	358	16	09/11/1978
_____ A3.	4,278,972	07/14/1981	Wozniak	340	703	01/08/1980
_____ A4.	4,600,274	07/15/1986	Morozumi	350	339	03/04/1983
_____ A5.	4,703,318	10/27/1987	Haggerty	346	723	04/16/1985
_____ A6.	4,851,825	07/25/1989	Naiman	340	728	07/24/1987
_____ A7.	5,057,739	10/15/1991	Shimada	313	477	12/28/1989
_____ A8.	5,113,455	05/12/1992	Scott	382	47	02/27/1990
_____ A9.	5,122,783	06/16/1992	Bassetti, Jr.	340	701	07/27/1990
_____ A10.	5,153,577	10/06/1992	Mackey	340	793	03/21/1988
_____ A11.	5,254,982	10/19/1993	Feigenblatt	345	148	01/12/1990
_____ A12.	5,298,915	03/29/1994	Bassetti, Jr.	345	149	06/16/1992

Examiner:

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



EXPRESS MAIL LABEL NO.: EV 329632523 US

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Sheet 2 of 11

Applicant: Beat Stamm, et al.

Serial No.: 10/606,047

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Filing Date: June 24, 2003

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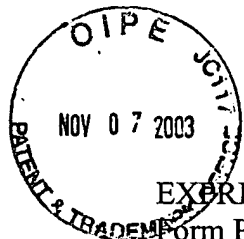
For: AUTOMATIC OPTIMIZATION OF THE POSITION  
OF STEMS OF TEXT CHARACTERS

_____ A13.	5,325,479	06/28/1994	Kaasila	395	151	05/28/1992
_____ A14.	5,334,992	08/02/1994	Rochat	345	22	10/26/1987
_____ A15.	5,334,996	08/02/1994	Tanigaki	345	152	10/23/1990
_____ A16.	5,341,153	08/23/1994	Benzschawel	345	152	06/13/1988
_____ A17.	5,404,432	04/04/1995	Koopman	395	144	07/14/1993
_____ A18.	5,420,208	05/30/1995	Reid	525	326.5	06/01/1994
_____ A19.	5,444,460	08/22/1995	Fujitaka	345	144	10/15/1993
_____ A20.	5,467,102	11/14/1995	Kuno	345	1	03/28/1995
_____ A21.	5,502,490	03/26/1996	Takanashi	358	296	06/02/1995
_____ A22.	5,543,819	08/06/1996	Farwell	345	150	11/19/1993
_____ A23.	5,548,305	08/20/1996	Rupel	345	150	01/09/1992
_____ A24.	5,555,360	09/10/1996	Kumazaki	395	143	04/04/1991
_____ A25.	5,623,593	04/22/1997	Spells, III	395	172	06/27/1994
_____ A26.	5,633,654	05/27/1997	Kennedy, Jr.	345	114	03/16/1995
_____ A27.	5,663,772	09/02/1997	Uehara	348	671	03/27/1995

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Sheet 3 of 11

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Serial No.: 10/606,047

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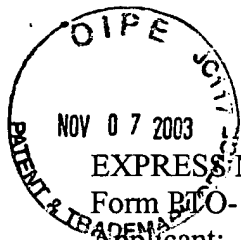
For: AUTOMATIC OPTIMIZATION OF THE POSITION  
OF STEMS OF TEXT CHARACTERS

_____ A28.	5,684,510	11/04/1997	Brassell	345	143	07/19/1994
_____ A29.	5,689,283	11/18/1997	Shirochi	345	132	07/14/1995
_____ A30.	5,757,347	05/26/1998	Han	345	88	05/17/1993
_____ A31.	5,767,837	06/16/1998	Hara	345	152	04/16/1993
_____ A32.	5,821,913	10/13/1998	Mamiya	345	88	12/14/1995
_____ A33.	5,847,698	12/08/1998	Reavey	345	173	09/17/1996
_____ A34.	5,857,067	01/05/1999	Hassett	395	150	12/23/1993
_____ A35.	5,859,648	01/12/1999	Moore	345	471	07/21/1997
_____ A36.	5,894,300	04/13/1999	Takizawa	345	115	09/09/1996
_____ A37.	5,909,221	06/01/1999	Nakai	345	433	12/20/1995
_____ A38.	5,963,185	10/05/1999	Havel	345	83	09/27/1996
_____ A39.	5,982,387	11/09/1999	Hellmann	345	469	07/25/1996
_____ A40.	6,115,151	09/05/2000	Popovich	359	9	12/21/1999
_____ A41.	6,151,006	11/21/2000	Yanagi	345	94	07/24/1995
_____ A42.	6,157,390	12/05/2000	Cheng	345	467	09/20/1996

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EXPRESS MAIL LABEL NO.: EV 329632523 US

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Applicant: Beat Stamm, et al.

Serial No.: 10/606,047

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Filing Date: June 24, 2003

Group: 2672

Confirmation No.: 3820

For: AUTOMATIC OPTIMIZATION OF THE POSITION  
OF STEMS OF TEXT CHARACTERS

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_____ A43.	6,175,372	01/16/2001	Ballard	345	470	06/27/1997
_____ A44.	6,211,859	04/03/2001	Lin	345	147	02/24/1998
_____ A45.	6,232,947	05/15/2001	Miyawaki	345	99	03/14/1995
_____ A46.	6,249,908	06/19/2001	Stamm	717	5	03/27/1998

Foreign Patent Documents

<u>Examiner Initial*</u>	<u>Document Number</u>	<u>Publ. Date</u>	<u>Country or Patent Office</u>	<u>Sub Class</u>	<u>Class</u>	<u>Trans- lation</u>
_____ A47.	EP0330361 B1	04/21/1993	EPO	G09G	1/28	English
_____ A48.	EP0435391 B1	03/29/1995	EPO	G09G	3/20	English
_____ A49.	EP0526135 B1	02/03/1993	EPO	G02F	1/1343	English
_____ A50.	EP0673012 A2	09/20/1995	EPO	G09G	3/36	English

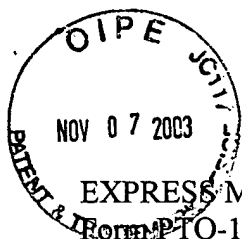
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EXPRESS MAIL LABEL NO.: EV 329632523 US

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Sheet 5 of 11

Applicant: Beat Stamm, et al.

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Other Documents

(including author (if listed), title, relevant pages, date of publication including at least month and year).

Examiner

Initial\*

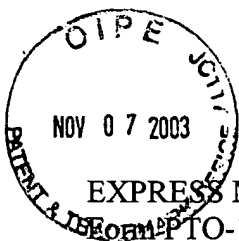
- \_\_\_\_\_ A51. / Ahumada, A.J. et al. "43.1 A Simple Vision Model for Inhomogeneous Image-Quality Assessment" *1998 SID*
- \_\_\_\_\_ A52. / Barbier, B. "25.1: Multi-Scale Filtering for Image Quality on LCD Matrix Displays" *SID 96 Digest*
- \_\_\_\_\_ A53. / Barten, P.G.J. "P-8: Effect of Gamma on Subjective Image Quality" *SID 96 Digest*
- \_\_\_\_\_ A54. Beck, D.R. "Motion Dithering for Increasing Perceived Image Quality for Low-Resolution Displays" *1998 SID*
- \_\_\_\_\_ A55. Bedford-Roberts, J. et al. "10.4: Testing the Value of Gray-Scaling for Images of Handwriting" *SID 95 Digest, pp. 125-128*
- \_\_\_\_\_ A56. Chen, L.M, et al. "Visual Resolution Limits for Colour Matrix Displays" *Displays-Technology and Applications*, vol. 13, No. 4, 1992, pp. 179-186
- \_\_\_\_\_ A57. Cordonnier, V. "Antialiasing Characters by Pattern Recognition" *Proceedings of the SID*, vol. 30, No. 1, 1989, pp. 23-28

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Sheet 6 of 11

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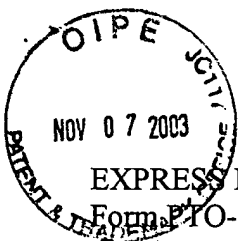
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- \_\_\_\_\_ A58. Cowan, W. "Chapter 27, Displays for Vision Research" *Handbook of Optics, Fundamentals, Techniques & Design*, Second Edition, vol.1, pp 27.1-27.44.
- \_\_\_\_\_ A59. Crow, F.C. "The Use of Greyscale for Improved Raster Display of Vectors and Characters" *Computer Graphics*, vol. 12, No. 3, Aug. 1978, pp.1-5.
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- \_\_\_\_\_ A61. Gille, J. et al. "Grayscale/Resolution Trade-Off for Text: Model Predictions and Psychophysical Results for Letter Confusion and Letter Discrimination" *Final Report*, Oct. 1992-Mar. 1995.
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- \_\_\_\_\_ A63. Gupta, S. et al. "Anti-Aliasing Characters Displayed by Text Terminals" *IBM Technical Disclosure Bulletin*, vol. 25, No. 12, May 1983, pp. 6434-6436.
- \_\_\_\_\_ A64. Hara Z. et al. "Picture Quality of Different Pixel Arrangements for Large-Sized Matrix Displays" *Electronics and Communications in Japan*, Part 2, vol. 77, No. 7, 1994, pp. 105-120.
- \_\_\_\_\_ A65. Kajiya, Jr. et al. "Filtering High Quality Text For Display on Raster Scan Devices" *Computer Graphics*, vol. 15, No. 3, Aug. 1981, pp. 7-15.
- \_\_\_\_\_ A66. Kato, Y. et al. "13.2: A Fourier Analysis of CRT Displays Considering the Mask Structure, Beam Spot Size, and Scan Pattern, 1998 SID
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Sheet 7 of 11

Applicant: Beat Stamm, et al.

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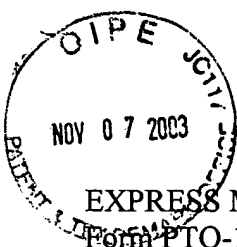
For: AUTOMATIC OPTIMIZATION OF THE POSITION  
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- \_\_\_\_\_ A67. Krantz, J. et al. "4.5: Color Matrix Display Image Quality: The Effects of Luminance and Spatial Sampling" *SID 90 Digest*, pp. 29-32.
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- \_\_\_\_\_ A69. Mitchell, D.P. "Generating Antialiased Images at Low Sampling Densities" *Computer Graphics*, vol. 21, No. 4, Jul. 1987, pp. 65-69.
- \_\_\_\_\_ A70. Mitchell, D.P. "Reconstruction Filters in Computer Graphics" *Computer Graphics*, vol. 22, No. 4, Aug. 1988, pp. 221-228.
- \_\_\_\_\_ A71. Morris, R.A. et al. "Legibility of Condensed Perceptually-Tuned Grayscale Fonts" *Electronic Publishing, Artistic Imaging, and Digital Typography*, 7<sup>th</sup> International Conference on Electronic Publishing, Mar. 30-Apr. 3, 1998, pp. 281-293.
- \_\_\_\_\_ A72. Murch, G. et al. "7.1: Resolution and Addressability: How Much is Enough?" *SID 85 Digest*, pp. 101-103.
- \_\_\_\_\_ A73. Naiman, A. "Some New Ingredients for the Cookbook Approach to Anti-Aliased Text" *Proceedings Graphics Interface 84*, Ottawa, Ontario, May 28-Jun. 1, 1984, pp. 99-108.
- \_\_\_\_\_ A74. Naiman, A. et al. "Rectangular Convolution for Fast Filtering of Characters" *Computer Graphics*, vol. 21, No. 4, Jul. 1987, pp. 233-242.
- \_\_\_\_\_ A75. Naiman, A.C. "10.1: The Visibility of Higher-Level Jags" *SID 95 Digest* pp. 113-116.
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Sheet 8 of 11

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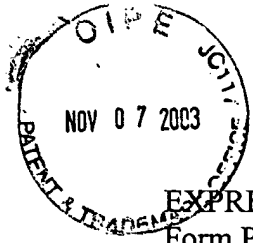
For: AUTOMATIC OPTIMIZATION OF THE POSITION  
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- \_\_\_\_\_ A76. Peli, E. "35.4: Luminance and Spatial-Frequency Interaction in the Perception of Contrast" *SID 96 Digest*.
- \_\_\_\_\_ A77. Pringle, A. "Aspects of Quality in the Design and Production of Text" *Association of Computer Machinery*, 1979, pp. 63-70.
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Sheet 9 of 11

Applicant: Beat Stamm, et al.

Serial No.: 10/606,047

Att'y Docket No.: 14984.4.1.1

Filing Date: June 24, 2003

Group: 2672

Confirmation No.: 3820

For: AUTOMATIC OPTIMIZATION OF THE POSITION  
OF STEMS OF TEXT CHARACTERS

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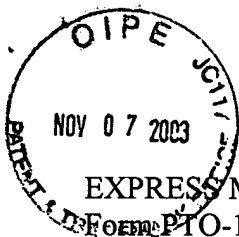
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For: AUTOMATIC OPTIMIZATION OF THE POSITION  
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### References Cited by Applicants

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citations not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as references cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

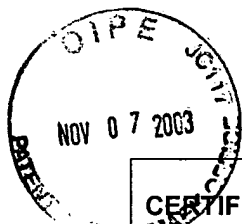
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**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Beat Stamm, et al.

Docket No.

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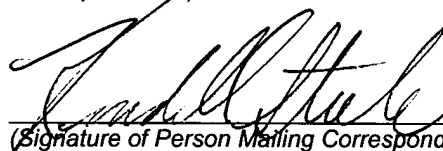
Invention: AUTOMATIC OPTIMIZATION OF THE POSITION OF STEMS OF TEXT CHARACTERS

I hereby certify that the Transmittal letter (2 pages) (in triplicate); Information Disclosure Statement (2 pgs); Form PTO-1449 Listing all Cited References (11 pgs); Legible Copies of 96 Cited References; and postcard are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 7, 2003.

Kendell Steele

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